

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
)  
HAN, Seok Jin et. al. ) Group Art Unit: 2629  
)  
Application No.: 10/821,387 ) Confirmation No. 1597  
)  
Filed: April 9, 2004 ) Examiner: HJERPE, Richard A.  
)  
For: SYSTEM AND METHOD FOR )  
IMPROVING SUB-PIXEL )  
RENDERING OF IMAGE DATA IN )  
NON-STRIPED DISPLAY )  
SYSTEMS )  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicant brings to the attention of the Examiner the documents listed on the attached PTO SB08A and/or SB08B form(s). This Information Disclosure Statement (IDS) is being filed:

- ☐ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d),
- ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application;
- ☒ before the mailing of a first Office action on the merits;
- ☐ before the mailing of a first Office action after the filing of a request for continued examination under § 1.114.

Under the provisions of 37 C.F.R. § 1.97(b), no fee is required to file this Information Disclosure Statement.

Copies of cited foreign documents and non-patent literature are submitted concurrently with this IDS via the EFS-Web electronic filing system.

Applicant directs the Examiner's attention to the related commonly-owned applications listed in the table below. These applications may have subject matter that is related to the above-referenced application. On the attached IDS SB/08A Form(s) Applicant has cited documents that have been cited in Section 102 and 103 rejections by the respective Examiner in any of the below-referenced related applications in which prosecution has occurred. In the table, the current prosecution status of the related application is provided as of the filing date of this IDS. In the table, any reference to "NF" means "Non-Final", and any reference to "OA" means "Office Action."

Application Number	Examiner	Art Unit	Attorney Docket No.	Current Status
7, 046,256	(n/a)	(n/a)	8831.0023	Issued
7/068,287	(n/a)	(n/a)	08831.0023-01	Issued
7/084,923	(n/a)	(n/a)	8831.0061	Issued
11/427,254	TBD	2143	08831.0061-01	Awaiting First OA

Applicant has also cited the published application documents or issued patent documents for the above-listed cases. Applicant has further cited relevant non-patent literature documents published by one or more of the named inventors and other authors for background information about the display technology that forms the context of the subject matter of the application.

Applicant respectfully requests that the Examiner consider the listed documents and indicate that they were considered by making the appropriate notations on the attached form(s).

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that the listed documents are

material or constitute "prior art." If the Examiner applies any documents as prior art against any claims in the application and Applicant determines that the cited documents do not constitute "prior art" under United States law, Applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Respectfully submitted,

By:           /Judith C. Bares/            
Judith C. Bares Reg. No. 34,825

Dated:           December 11, 2006

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>		
				Application Number	10/821,387	
				Filing Date	April 9, 2004	
				First Named Inventor	HAN, Seok Jin	
				Art Unit	2629	
				Examiner Name	HJERPE, Richard A.	
Attorney Docket Number	08831.0064					
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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-5,010,413	04-23-1991	Bahr	
		US-5,062,057	10-29-1991	Blacken et al	
		US-5,113,274	05-12-1992	Takahashi et al	
		US-6,414,719 B1	07-02-2002	Parikh	
		US-2003/0006978 A1	01-09-2003	Fujiyoshi	
		US-7,046,256 B2	05-16-2006	Credelle	
		US-7,068,287 B2	06-27-2006	Credelle	
		US-7,084,923 B2	08-01-2006	Brown Elliott et al	
		US-2004/0140983 A1	07-22-2004	Credelle	
		US-2005/0099540 A1	05-12-2005	Elliott et al	
		US-2006/0061605 A1	03-23-2006	Credelle	
		US-2006/0238649 A1	10-26-2006	Brown Elliott et al	
		US-5,341,153	08-23-1994	Benzschawel et al	
		US-5,398,066	03-14-1995	Martinez-Uriegas et al	
		US-6,278,434 B1	08-21-2001	Hill et al	
		US-6,360,023 B1	03-19-2002	Betrissey et al	
		US-6,393,145 B2	05-21-2002	Betrissey et al	
		US-6,614,414 B2	09-02-2003	De Haan et al	
		US-6,738,526 B1	05-18-2004	Betrissey et al	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		WO 00/42762	07-20-2000	Betrissey et al		

Examiner Signature		Date Considered	
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\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST .16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 2213-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22131-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

*(Use as many sheets as necessary)*

**Complete if Known**

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First Named Inventor	HAN, Seok Jin
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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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Sheet	3	of	4	Attorney Docket Number	08831.0064

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Betrissey, C., et al., "Displaced Filtering for Patterned Displays, SID Symp. Digest 1999, pgs 296-299	
		Brown Elliott, C., "Active Matrix Display....", IDMC 2000, 185-189, 8/2000.	
		Brown Elliott, C., "Color Subpixel Rendering Projectors and Flat Panel Displays," SMPTE, Feb 27-Mar 1, 2003, Seattle, WA pp 1-4	
		Brown Elliott, C, "Co-Optimization of Color AMLCD Subpixel Architecture and Rendering Algorithms," SID 2002 Proceedings Paper, May 30, 2002 pp 172-175	
		Brown Elliott, C, "Development of the PenTile Matrix™ Color AMLCD Subpixel Architecture and Rendering Algorithms", SID 2003, Journal Article	
		Brown Elliott, C, "New Pixel Layout for PenTile Matrix™ Architecture", IDMC 2002, pp 115-117	
		Brown Elliott, C, "Reducing Pixel Count Without Reducing Image Quality", Information Display 12/99, Vol 1, pp 22-25	
		Credelle, Thomas, "P-00: MTF of High-Resolution PenTile Matrix Displays", Eurodisplay 02 Digest, 2002 Pages 1-4	
		Klompshouwer, Michiel, "Subpixel Image Scaling for Color Matrix Displays, SID Symp. Digest, 05/02, pp 176-179	
		Michiel A. Klompshouwer, Gerard de Haan, Subpixel image scaling for color matrix displays, Journal of the Society for Information Display, Volume 11, Issue 1, March 2003, pp. 99-108	

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Sheet	4	of	4
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## NON PATENT LITERATURE DOCUMENTS

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